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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,779	12/09/2003	Peter J. Morrisroe	03141-P0445B	4828
24126	7590	04/19/2006	EXAMINER	
ST. ONGE STEWARD JOHNSTON & REENS, LLC			EVANS, FANNIE L	
986 BEDFORD STREET			ART UNIT	
STAMFORD, CT 06905-5619			PAPER NUMBER	
			2877	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/730,779

Applicant(s)

MORRISROE ET AL.

Examiner

F. L. Evans

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☒ Claim(s) 13-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections – 35 U.S.C. § 112***

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The lack of an antecedent for “the excited atoms” in line 9 of claim 22 renders the claim indefinite.

Claims 13-22 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13-21 are incomplete in that independent claim 13 fails to positively set forth the components of the system for generating the loop current, for generating the plasma and introducing the material sample into the plasma. The only component specifically/positively set forth is a spectrometer.

Claim 22 is incomplete in that it also fails to positively set forth the components of the system for introducing the carrier gas and introducing the material sample.

The independent claims are replete functional or operational language. The structure which goes to make up the system must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. Applicant’s attention is directed to the suggestions under the heading “*Allowable Subject Matter*”, below.

***Response to Arguments***

Applicant's arguments filed January 30, 2006 have been fully considered but they are not persuasive with respect to independent claim 13 and 22.

***Allowable Subject Matter***

Claims 1-12 are allowed over the prior art of record.

Claims 13-22 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. § 112, 2nd paragraph, set forth in this Office action.

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Below are suggested forms for claims 13 and 22 which would positively set forth the elements of the spectroscopic system.

13. A spectroscopic system comprising:

an electric current source for generating a loop current, said loop current having an associated magnetic field;

means for generating a plasma at least in part by a carrier gas flow introduced within the magnetic field via a carrier gas conduit, said plasma being confined within the magnetic field;

a material sample conduit for introducing a material sample into the plasma, the atoms of said material sample being excited within the plasma, and;

a spectrometer for analyzing characteristic features the excited atoms.

22. A spectroscopic system comprising:

an electric current source for generating a loop current, the loop current having an associated magnetic field;

a carrier gas conduit for introducing a carrier gas within the magnetic field, said carrier gas for sustaining a plasma generated within the magnetic field;

a material sample conduit for introducing an atomized material sample into the plasma, and;

a spectrometer positioned in the vicinity of the plasma for analyzing characteristic features of excited atoms of the material sample.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### *Fax/Telephone Numbers*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner whose telephone number is (571) 272-2414.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**F. L. EVANS**  
**PRIMARY EXAMINER**  
**ART UNIT 2877**

fle  
4/17/2006